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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/016,675	12/13/2001	James H. Boyden	4000.2.59	2516

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EXAMINER
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RAMAKRISHNAIAH, MELUR

ART UNIT	PAPER NUMBER
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2643

DATE MAILED: 07/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/016,675	<b>Applicant(s)</b> BOYDEN ET AL.	
	<b>Examiner</b> Melur Ramakrishnaiah	<b>Art Unit</b> 2643	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 13 December 2001.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-41 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-41 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>1-7-03/12-13-02, 1-29-02</u> | 6) <input type="checkbox"/> Other: _____  |

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-2, 7-8, 12, 21-22, 27-28, 32, 41, are rejected under 35 U.S.C 102(b) as being anticipated by Hamada (JP11-098484).

Regarding claim 1, Hamada discloses an apparatus for receiving light for conversion to a video signal from a position proximate to an eye-level of a person viewing a display, the apparatus comprising: a base (41,50, Drawings: 5-6) an image receiving device (40/52, Drawings: 5-6) that collects light, and a bendable coupling (42/51, Drawings: 5-6) having a proximal end coupled to the base and a distal end coupled to the image receiving device (41/50, Drawings: 5-6), the bendable coupling having a stiffness selected to support distal end at a plurality of positions along and within a circumference a generally hemispherical positioning zone, wherein bendable coupling is deformable into a deployed position in which the distal end is positioned within a deployment zone beside the screen portion (Drawings: 1, 4, paragraphs: 0035-0037, 0016-0033).

Regarding claim 21, Hamada discloses a method for receiving light for conversion to a video signal from a position to proximate to an eye-level of a person viewing a display with an apparatus comprising a base (41,50, Drawings: 5-6), an image receiving device (40/52, Drawings: 5-6), and bendable coupling having a proximal end

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coupled to base and a distal end coupled to the image receiving device, the method comprising: bending the bendable coupling (42/51, Drawings: 5-6) to position the image receiving device proximate to an eye-level of a person viewing the display (13A, Drawing 1), orienting the image receiving device (40/52, Drawings: 5-6), to receive light from along the eye-level, receiving light through the image receiving device, and processing light to generate a video signal (paragraphs: 0035-0037, 0016-0033).

Regarding claim 41, Hamada discloses an apparatus for receiving light for conversion to video signal from a position proximate to an eye-level of a person viewing display, the apparatus comprising: a base (41,50, Drawings: 5-6), an image receiving means (40/52, Drawings: 5-6) that collects light, and bendable coupling having a proximal end coupled to the base and a distal end coupled to image receiving means, the bendable coupling (42/51, Drawings: 5-6) means having a stiffness selected to support the distal end at a plurality of positions along and within a circumference of a generally hemispherical positioning zone, wherein the bendable coupling means is deformable into a deployed disposition in which the distal end is positioned within the deployment zone beside the screen position (paragraphs: 0035-0037, 0016-0033).

Regarding claims 2, 7-8, 12, 22, 27-28, 32, Hamada further teaches the following: bendable coupling (42/51, Drawings: 5-6) is further deformable into a retracted disposition in which the distal end is not positioned within the deployable zone, image receiving device (40/52, Drawings: 5-6) comprises a camera that process the light to generate the video signal, electric wiring to convey the video signal from the camera to the base, base coupled to the display, bending bendable coupling comprises moving the

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bendable coupling from a retracted disposition in which the distal end is not positioned within a deployment zone beside a screen portion of the display to a deployed disposition in which distal end is positioned within the deployment zone (paragraphs: 0035-0037), image receiving device (40/52, Drawings: 5-6) comprises a camera that processes the light, conveying the video signal from the camera to the proximal end via electrical wiring extending from camera to the proximal end, coupling the base to the display (paragraphs: 0035-0037, 0016-0033).

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 3-6, 13-20, 23-26, 33-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hamada in view of Justkaitis et al. (WO 99/52416, hereinafter Justkaitis).

Regarding claims 3-6, 23-26, Hamada does not teach the following: a coherent fiber optic bundle connected to convey light from the image receiving device to the base, the image receiving device comprises a distal lens positioned to direct light into coherent fiber optic bundle, base comprises a camera that receives light from the coherent fiber optic bundle and processes the light to provide video signal, a proximal lens positioned to direct light from the coherent fiber optic cable into the camera, conveying light from the distal end to the proximal end via a coherent fiber optic bundle,

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receiving the light comprises capturing the light via a distal lens positioned to direct light into coherent fiber optic bundle, wherein the base comprises a camera that generates the video signal, conveying the light from the proximal end to the camera, conveying the light from the proximal end to the camera comprises positioning lens to direct light from the coherent fiber optic bundle into the camera.

However, Justkaitis discloses imaging apparatus which teaches the following: a coherent fiber optic bundle (1, fig. 1) connected to convey light from the image receiving device to the base, the image receiving device comprises a distal lens (5, fig. 1) positioned to direct light into coherent fiber optic bundle, base comprises a camera (3, fig. 1) that receives light from the coherent fiber optic bundle and processes the light to provide video signal, a proximal lens (fig. 1) positioned to direct light from the coherent fiber optic cable into the camera, conveying light from the distal end to the proximal end via a coherent fiber optic bundle, receiving the light comprises capturing the light via a distal lens positioned to direct light into coherent fiber optic bundle, wherein the base comprises a camera that generates the video signal, conveying the light from the proximal end to the camera, conveying the light from the proximal end to the camera comprises positioning lens to direct light from the coherent fiber optic bundle into the camera (fig. 1, page 3 lines 21-30).

Thus, it would have been obvious to one of ordinary skill in the art at the time invention was made to modify Hamada's system to provide for the following: a coherent fiber optic bundle connected to convey light from the image receiving device to the base, the image receiving device comprises a distal lens positioned to direct light into

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coherent fiber optic bundle, base comprises a camera that receives light from the coherent fiber optic bundle and processes the light to provide video signal, a proximal lens positioned to direct light from the coherent fiber optic cable into the camera, conveying light from the distal end to the proximal end via a coherent fiber optic bundle, receiving the light comprises capturing the light via a distal lens positioned to direct light into coherent fiber optic bundle, wherein the base comprises a camera that generates the video signal, conveying the light from the proximal end to the camera, conveying the light from the proximal end to the camera comprises positioning lens to direct light from the coherent fiber optic bundle into the camera as this arrangement would provide one of the methods, among many possible methods, of imaging the objects so as to suite the application requirements as shown by Justkaitis.

Hamada differs from claims 13-14, 33 in that he does not teach the following: a coherent fiber optic bundle that conveys light from a distal end to a proximal end; and receiving light in the distal end of the coherent fiber optic cable bundle and conveying the light through the fiber optic bundle from distal end to the proximal end.

Justkaitis teaches the following: a coherent fiber optic bundle that conveys light from a distal end to a proximal end; and receiving light in the distal end of the coherent fiber optic cable bundle and conveying the light through the fiber optic bundle from distal end to the proximal end (fig. 1, page 3 lines 21-30).

Thus, it would have been obvious to one of ordinary skill in the art at the time invention was made to modify Hamada's system to provide for the following: a coherent fiber optic bundle that conveys light from a distal end to a proximal end; and receiving

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light in the distal end of the coherent fiber optic cable bundle and conveying the light through the fiber optic bundle from distal end to the proximal end as this arrangement would provide one of the methods, among many possible methods, of imaging the objects so as to suite the application requirements as shown by Justkaitis.

Regarding claims 14-18, 34-38, Hamada further teaches the following: a bendable coupling having a proximal end and a distal end that supports the distal end, the proximal end of the bendable coupling is coupled at a location outside the deployment zone, the bendable coupling is deformable between the deployed disposition in which the distal end of the bendable coupling is positioned within the deployment zone, and a retracted disposition in which distal end of the bendable coupling is not positioned within the deployment zone, a base (41, 50, Drawings: 5-6) coupled to the proximal end of the bendable coupling and to the display (13, Drawing 1), camera comprises a base coupled to the proximal end of the bendable coupling and to the display, orienting the distal end to receive light from along the eye-level, bendable coupling has a proximal end coupled to a location outside a deployment zone beside a screen position of the display, the bendable coupling comprises moving the bendable coupling from a retracted position in which the distal end is not positioned within the deployment zone to a deployed position in which the distal end is positioned within the deployment zone (Drawings: 1, 4, paragraphs: 0035-0037, 0016-0033).

Hamada differs from claims 19-20 and 39-40 in that he does not teach the following: a distal lens positioned to direct light into the distal end of the coherent fiber



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optic bundle, a proximal lens positioned to direct the light from the proximal end of the coherent fiber optic bundle into the camera.

However, Justkaitis teaches the following: a distal lens positioned to direct light into the distal end of the coherent fiber optic bundle, a proximal lens positioned to direct the light from the proximal end of the coherent fiber optic bundle into the camera (fig. 1, page 3 lines 21-30).

Thus, it would have been obvious to one of ordinary skill in the art at the time invention was made to modify Hamada's system to provide for the following: a distal lens positioned to direct light into the distal end of the coherent fiber optic bundle, a proximal lens positioned to direct the light from the proximal end of the coherent fiber optic bundle into the camera as this arrangement would provide one of the methods, among many possible methods, of imaging the objects so as to suite the application requirements as shown by Justkaitis.

5. Claims 9-10 and 29-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hamada in view of Sato (JP09-307807).

Hamada differs from claims 9-10 and 29-30 in that he does not teach the following: a wireless transmitter positioned at the distal end of the bendable coupling to receive the video signal from the camera and transmit the video signal, a wireless receiver/base that receives video signal from the wireless transmitter.

However, Sato discloses wireless image pickup device which teaches the following: a camera (1, Drawing 1) wirelessly transmitting image to a controller (2, Drawing 1, see abstract and paragraph: 0006).

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Thus, it would have been obvious to one of ordinary skill in the art at the time invention was made to modify Hamada's system to provide for the following: a wireless transmitter positioned at the distal end of the bendable coupling to receive the video signal from the camera and transmit the video signal, a wireless receiver/base that receives video signal from the wireless transmitter as this arrangement would provide another means to transmit images from the camera to receiver as taught by Sato, thus meeting the application requirements.

6. Claims 11 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hamada in view of Felkel et al. (US PAT: 4,284,898, hereinafter Felkel).

Hamada differs from claims 11 and 31 in that Hamada does not teach the following: bendable coupling is translucent.

However, Felkel discloses high voltage stable optical coupler which teaches the following: bendable coupling is translucent (col. 1 lines 6-12).

Thus, it would have been obvious to one of ordinary skill in the art at the time invention was made to modify Hamada's system to provide for the following: bendable coupling is translucent as this arrangement would provide for required coupling to meet the application requirements as taught by Felkel.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melur Ramakrishnaiah whose telephone number is (571)272-8098. The examiner can normally be reached on 9 Hr schedule.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Curt Kuntz can be reached on (571) 272-7499. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Melur Ramakrishnaiah  
Primary Examiner  
Art Unit 2643